Annual Drinking Water Quality Report for 2023
Westerlo Water District

930 County Route 401
(Public Water Supply ID# 0130039

INTRODUCTION
To comply with State and Federal regulations, the Westerlo Water District will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. This report provides an overview of last year's water qua lity. Included are details about where your water comes from, what it contains, and how it compares to State standards. If you have any questions about this report or concerning your drinking water, please contact the Town at (518)797-3111.

WHERE DOES OUR WATER COME FROM?
In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public hea lth.

Our water source is groundwater drawn from a 300 foot deep drilled well. Water withdrawn from the well is disinfected by adding sodium hypochlorite prior to entering the storage tank and the distribution system. Our water system serves approximately 220 people. Average production is about 6,000 gallons per day.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?
As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds (petroleum products and solvents), and synthetic organic compounds (herbicides and pesticides). The table presented below depicts which compounds were detected in your drinking water. A separate table is also included showing contaminants that were tested and not detected. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Albany County Health Department at (518) 447-4620.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Arsenic	No	1/29/15	5.7	ug/L	10	10 (MCL)	Erosion of natural deposits
Barium	No	1/29/15	0.08	mg/L	2	2 (MCL)	Erosion of natural deposits
Fluoride	No	1/29/15	0.5	mg/L	NIA	2.2 (MCL)	Erosion of natural deposits
Sodium[3]	No	12/27/05	170	mg/L	NIA	N / A	Erosion of natural deposits
Chromium	No	5/24/22	0.0011	mg/L		0.1(MCL)	Erosion of natural deposits
Nickel	No	5/24/22	0.0006	mg/L		0.1(MCL)	Erosion of natural deposits
Nitrate	No	5/24/22	0.074	mg/L		1 0	Organic material
THMs and HAAs	No	8115/18	54 & 31	ug/L	NIA	N & 60	Disinfection By-products produced when water is chlorinated
Specific THM Compounds							
Bromoform(JH/L)	No	8/29/18	5.4	ug/L	N/A	N/A	Disinfection by-products produced when water is chlorinated
Chloroform's (ug/L)	No	8/29/18	N/D	ug/L	N/A	N/A	Disinfection by-products produced from chlorination
Dinromochloromethane (ug/L)	No	8/29/18	2.1	ug/L	N/A	N/A	Disinfection by-products produced from chlorination
Bromochloromethane (ug/L)	No	8/29/18	0.8	ug/L	N/A	N/A	Disinfection by-products produced from chlorination
Lead [1]	No	09/28/15	<0.001	mg/L	0	0.015 (AL)	Corrosion of household plumbingsvstems.
Copper[2]	No	09/28/15	0.145	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems.

Contaminant	Units	MCL	MC LG	Sources in Drinking Water	Health Effects Language
Radioactive Contaminants					
Beta particle and photon activity from manmade radionuclides	mrem/ yr7	48	,0	Decay of natural deposits and man-made emissions.	Certain materials are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Gross alpha activity (including radium – 226 but excluding radon and uranium)	PCi/L 9	151 0	0	Erosion of natural deposits.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined radium – 226 and 228	Pci/L	510	0	Erosion of natural deposits.	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium	ug/l	30 10	0	Erosion of natural deposits.	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer.
Inorganics11					
Asbestos	MFL1 2	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Antimony	ug/l13	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
Arsenic	ug/l	101 4	n/a	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Barium	mg/l1 5	2	2	Discharge of drilling wastes;	Some people who drink water containing barium in excess of the MCL over many years could

7 Millirems per year (mrem/yr) –measure of radiation absorbed by the body.

8 If beta particles are detected at or below 50 pCi/l, report the detected level in pCi/l. This will provide consumers with a standard against which to compare that detected level, include "50*" in the MCL column (rather than the actual MCL of 4 mrem/year) and include a footnote to the table that says "The State considers 50 pCi/l to be the level of concern for beta particles." If beta particles are detected above 50 pCi/l, the water supplier must determine the actual radioactive constituents present in the water to calculate the dose exposure level in mrem/year, and must report both the detected level and MCL as mrem/year.

9 Picocuries per liter (pCi/L) –picocuries per liter is a measure of the radioactivity in water.

10 A MCL violation occurs when the annual composite of four quarterly samples or the average of the analysis of four quarterly samples exceeds the MCL.

11 If the results of a monitoring sample analysis exceed the MCL, the water supplier shall collect one more sample from the same sampling point within two weeks of as soon as practical. An MCL violation occurs when the average (rounded off to the same number of significant figures as the MCL for the contaminant in question) of the two results exceed the MCL.

12 Million Fibers per Liter (MFL) –million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers

13 Micrograms per liter (ug/l) or parts per billion (ppb).

14 If arsenic is detected above 5 ug/l, but below 10 ug/l (the MCL) your Annual Water Quality Report must contain the following statement: "NYS and EPA have promulgated a drinking water arsenic standard of 10 parts per billion. While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

15 Milligrams per liter (mg/l) or parts per million (ppm).

Notes:

I - During 2015, six samples were collected and analyzed for Lead. The number presented is the average of the two highest levels detected . Theaction level for Lead was not exceeded at any of the sites tested.

2 - During 2015, six samples were collected and analyzed for copper. The number presented is the average of the two highest levels detected. The action level for Copper was not exceeded at any of the sites tested.

- Water containing more than 20 mg/L should not be consumed by persons on severely restricted sodium diets. Water containing more than 270mg/L should not be consumed by persons on moderately restricted sodium diets.

Definitions **: < - Less than**

Maximum Contamil1al1t Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): The level ofa contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing

evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfecta11t Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination
Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.
Milligrams per liter {mg/1): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter {ug/1): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Table of Contaminants Monitored But Not Detected			
Contaminant	*Date of Last Sample*	*Required Frequency*	*Comment*
Group I			
Total Coliform Bacteria	*Monthly*	*Monthly*	*Testing for E. coli required if Total Coliform is detected*
Inorganic Chemicals	*5/24/22*	*3 Years*	*Arsenic , Barium, Cadmium, Chromium, Fluoride, Selenium, Mercury*
Group 2			
Inorganic Chemicals	*5/24/22*	*3 Years*	*Antimony, Beryllium, Cyanide, Nickel, Thallium, Sulfate*
Synthetic Organic Chemicals	*8/23/22*	*3 Years*	*Group of 33 Pesticides & Herbicides*
Principal Organic Chemicals	*5/24/22*	*6 Years*	*Group of 57 Solvents, petroleum products and Vinyl Chloride*
Gross Alpha & Beta radioactivity	*4/4/23*	*9 Years*	*Naturally occurring*
PFOA/PFOS	*12/14/23*	*Annual*	*Perfourinated and Polyflourinated Alkyd Compounds*

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have beer detected; however, these contaminants detected were below the level allowed by the State.

This data was collected from various water quality reports provided by NYS DoH, between 2001 and 2018. Since the bromomethan was first detected in the finished water in February of 2018, there have been multiple rounds of water quality testing to verify wate quality results and track any changes.

Iron, Manganese and Arsenic are all present below their respective limits and present no concerns that would warrant treatment. Th well water has high alkalinity. high pH, and low hardness. Based on this raw water quality, treatment is not necessary for iron an manganese control, or for arsenic. Natural organic material (NOM) content in the raw water is unknown at this time. Water sample have been collected and submitted to a laboratory for analysis of total organic carbon (TOC) and dissolved organic carbon (DOC) The results of these tests will be important for determining the final recommendation for reduction of bromomethane concentration in the finished water.

The most notable characteristic of the raw water is the exceptionally high levels of bromide (0.43 mg/L). Bromide is commonly found in nature along with chloride. US drinking water sources were characterized during the 1996 EPA Information Collection Rule (ICR) with bromide values reported as 0.095± 0.132 mg/L[1]. Significant regional variation was observed with the higher values in Texas and Florida and lower values inland(e.g., similar to Upstate New York). Ground waters were associated with higher bromide concentrations while surface water were associated with lower values. Exposure to the bromide ion itself is considered to have very low human health risk and thus has been left unregulated by the EPA

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

1 USEPA ((2000). ICR Auxiliary 1 Database Version 5.0 Query Tool Version 2.0, U.S. Environmental Protection Agency

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.